

## Protein analysis by SDS gel electrophoresis mode

An example of protein analysis in sodium dodecyl sulfate (SDS) gel electrophoresis format using Shimadzu microchip electrophoresis system, MCE-2010, is reported here. Since the system utilizes the UV absorptivity of protein, staining and destaining are not necessary as usually required in slab gel electrophoresis.

### 1. Separation of a mixture of standard proteins

- Sample : 1:  $\alpha$ -Lactalbumin (14,400 Da), 700 ng/  $\mu$ L  
2: Trypsin inhibitor (20,100 Da), 480 ng/  $\mu$ L  
3: Carbonic anhydrase (30,000 Da), 500 ng/  $\mu$ L  
4: Ovalbumin (43,000 Da), 880 ng/  $\mu$ L  
5: Albumin (66,000 Da), 500 ng/  $\mu$ L  
6: Phosphorylase b (97,000 Da), 400 ng/  $\mu$ L

Chip : Type D[110-50]C

Buffer : SDS gel electrophoresis buffer

Condition : Injection HV2 =0, HV2 =0.64, HV3 =0.28, HV4 =0.16 [kV], 50sec

Separation HV1 =0.24, HV2 =0.24, HV3 =0, HV4 =0.64 [kV], 80sec

Wave length : 214nm

Data :

